



# ENTERED

PCT10

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/049,586

DATE: 03/01/2002

TIME: 14:44:19

Input Set : A:\W127221.txt

Output Set: N:\CRF3\03012002\J049586.raw

```

4 <110> APPLICANT: Carballo-Jane, Ester
5   Lai, Wi S.
6   Blackshear, Perry J.
8 <120> TITLE OF INVENTION: TTP-RELATED ZINC FINGER DOMAINS AND METHODS OF USE
10 <130> FILE REFERENCE: 14014.0349U2
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/049,586
C--> 12 <141> CURRENT FILING DATE: 2002-02-14
12 <150> PRIOR APPLICATION NUMBER: PCT/US00/22199
13 <151> PRIOR FILING DATE: 2000-08-14
15 <150> PRIOR APPLICATION NUMBER: 60/148,810
16 <151> PRIOR FILING DATE: 1999-08-13
18 <160> NUMBER OF SEQ ID NOS: 45
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 326
24 <212> TYPE: PRT
25 <213> ORGANISM: Homo sapiens
27 <400> SEQUENCE: 1
28 Met Asp Leu Thr Ala Ile Tyr Glu Ser Leu Leu Ser Leu Ser Pro Asp
29   1               5               10               15
30 Val Pro Val Pro Ser Asp His Gly Gly Thr Glu Ser Ser Pro Gly Trp
31               20               25               30
32 Gly Ser Ser Gly Pro Trp Ser Leu Ser Pro Ser Asp Ser Ser Pro Ser
33   35               40               45
34 Gly Val Thr Ser Arg Leu Pro Gly Arg Ser Thr Ser Leu Val Glu Gly
35   50               55               60
36 Arg Ser Cys Gly Trp Val Pro Pro Pro Gly Phe Ala Pro Leu Ala
37 65               70               75               80
38 Pro Arg Leu Gly Pro Glu Leu Ser Pro Ser Pro Thr Ser Pro Thr Ala
39               85               90               95
40 Thr Ser Thr Thr Pro Ser Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe
41   100              105              110
42 Ser Glu Ser Gly Arg Cys Arg Tyr Gly Ala Lys Cys Gln Phe Ala His
43   115              120              125
44 Gly Leu Gly Glu Leu Arg Gln Ala Asn Arg His Pro Lys Tyr Lys Thr
45   130              135              140
46 Glu Leu Cys His Lys Phe Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser
47 145              150              155              160
48 Arg Cys His Phe Ile His Asn Pro Ser Glu Asp Leu Ala Ala Pro Gly
49               165              170              175
50 His Pro Pro Val Leu Arg Gln Ser Ile Ser Phe Ser Gly Leu Pro Ser
51               180              185              190
52 Gly Arg Arg Thr Ser Pro Pro Pro Gly Leu Ala Gly Pro Ser Leu

```

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```

53          195          200          205
55 Ser Ser Ser Ser Phe Ser Pro Ser Ser Ser Pro Pro Pro Gly Asp
56      210          215          220
57 Leu Pro Leu Ser Pro Ser Ala Phe Ser Ala Ala Pro Gly Thr Pro Leu
58 225          230          235          240
59 Ala Arg Arg Asp Pro Thr Pro Val Cys Cys Pro Ser Cys Arg Arg Ala
60          245          250          255
61 Thr Pro Ile Ser Val Trp Gly Pro Leu Gly Gly Leu Val Arg Thr Pro
62          260          265          270
63 Ser Val Gln Ser Leu Gly Ser Asp Pro Asp Glu Tyr Ala Ser Ser Gly
64          275          280          285
65 Ser Ser Leu Gly Gly Ser Asp Ser Pro Val Phe Glu Ala Gly Val Phe
66      290          295          300
67 Ala Pro Pro Gln Pro Val Ala Ala Pro Arg Arg Leu Pro Ile Phe Asn
68 305          310          315          320
69 Arg Ile Ser Val Ser Glu
70          325
72 <210> SEQ ID NO: 2
73 <211> LENGTH: 338
74 <212> TYPE: PRT
75 <213> ORGANISM: Homo sapiens
77 <400> SEQUENCE: 2
78 Met Thr Thr Thr Leu Val Ser Ala Thr Ile Phe Asp Leu Ser Glu Val
79 1          5          10          15
80 Leu Cys Lys Gly Asn Lys Met Leu Asn Tyr Ser Ala Pro Ser Ala Gly
81          20          25          30
82 Gly Cys Leu Leu Asp Arg Lys Ala Val Gly Thr Pro Ala Gly Gly Gly
83      35          40          45
84 Phe Pro Arg Arg His Ser Val Thr Leu Pro Ser Ser Lys Phe Arg Gln
85      50          55          60
86 Asn Gln Leu Leu Ser Ser Leu Lys Gly Glu Pro Ala Pro Ala Leu Ser
87 65          70          75          80
88 Ser Arg Asp Ser Arg Phe Arg Asp Arg Ser Phe Ser Glu Gly Gly Glu
89          85          90          95
90 Arg Leu Leu Pro Thr Gln Lys Gln Pro Gly Gly Gly Gln Val Asn Ser
91          100          105          110
92 Ser Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala
93      115          120          125
94 Cys Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu
95      130          135          140
96 Arg Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr
97 145          150          155          160
98 Phe His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile
99          165          170          175
100 His Asn Ala Glu Glu Arg Arg Ala Leu Ala Gly Ala Arg Asp Leu Ser
101          180          185          190
102 Ala Asp Arg Pro Arg Leu Gln His Ser Phe Ser Phe Ala Gly Phe Pro
103          195          200          205
104 Ser Ala Ala Ala Thr Ala Ala Ala Thr Gly Leu Leu Asp Ser Pro Thr

```

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```

105      210      215      220
106 Ser Ile Thr Pro Pro Pro Ile Leu Ser Ala Asp Asp Leu Leu Gly Ser
107 225      230      235      240
108 Pro Thr Leu Pro Asp Gly Thr Asn Asn Pro Phe Ala Phe Ser Ser Gln
109      245      250      255
110 Glu Leu Ala Ser Leu Phe Ala Pro Ser Met Gly Leu Pro Gly Gly Gly
111      260      265      270
112 Ser Pro Thr Thr Phe Leu Phe Arg Pro Met Ser Glu Ser Pro His Met
113      275      280      285
114 Phe Asp Ser Pro Pro Ser Pro Gln Asp Ser Leu Ser Asp Gln Glu Gly
115      290      295      300
116 Tyr Leu Ser Ser Ser Ser Ser Ser His Ser Gly Ser Asp Ser Pro Thr
117 305      310      315      320
118 Leu Asp Asn Ser Arg Arg Leu Pro Ile Phe Ser Arg Leu Ser Ile Ser
119      325      330      335
120 Asp Asp
123 <210> SEQ ID NO: 3
124 <211> LENGTH: 492
125 <212> TYPE: PRT
126 <213> ORGANISM: Homo sapiens
128 <400> SEQUENCE: 3
129 Met Ser Thr Thr Leu Leu Ser Ala Phe Tyr Asp Val Asp Phe Leu Cys
130 1      5      10      15
131 Lys Thr Glu Lys Ser Leu Ala Asn Leu Asn Leu Asn Asn Met Leu Asp
132      20      25      30
133 Lys Lys Ala Val Gly Thr Pro Val Ala Ala Ala Pro Ser Ser Gly Phe
134      35      40      45
135 Ala Pro Gly Phe Leu Arg Arg His Ser Ala Ser Asn Leu His Ala Leu
136      50      55      60
137 Ala His Pro Ala Pro Ser Pro Gly Ser Cys Ser Pro Lys Phe Pro Gly
138 65      70      75      80
139 Ala Ala Asn Gly Ser Ser Cys Gly Ser Ala Ala Ala Gly Gly Pro Thr
140      85      90      95
141 Ser Tyr Gly Thr Leu Lys Glu Pro Ser Gly Gly Gly Gly Thr Ala Leu
142      100      105      110
143 Leu Asn Lys Glu Asn Lys Phe Arg Asp Arg Ser Phe Ser Glu Asn Gly
144      115      120      125
145 Asp Arg Ser Gln His Leu Leu His Leu Gln Gln Gln Gln Lys Gly Gly
146      130      135      140
147 Gly Gly Ser Gln Ile Asn Ser Thr Arg Tyr Lys Thr Glu Leu Cys Arg
148 145      150      155      160
149 Pro Phe Glu Glu Ser Gly Thr Cys Lys Tyr Gly Glu Lys Cys Gln Phe
150      165      170      175
151 Ala His Gly Phe His Glu Leu Arg Ser Leu Thr Arg His Pro Lys Tyr
152      180      185      190
153 Lys Thr Glu Leu Cys Arg Thr Phe His Thr Ile Gly Phe Cys Pro Tyr
154      195      200      205
155 Gly Pro Arg Cys His Phe Ile His Asn Ala Asp Glu Arg Arg Pro Ala
156      210      215      220

```

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TIME: 14:44:19

Input Set : A:\W127221.txt

Output Set: N:\CRF3\03012002\J049586.raw

```

157 Pro Ser Gly Gly Ala Ser Gly Asp Leu Arg Ala Phe Gly Thr Arg Asp
158 225                230                235                240
159 Ala Leu His Leu Gly Phe Pro Arg Glu Pro Arg Pro Lys Leu His His
160                245                250                255
161 Ser Leu Ser Phe Ser Gly Phe Pro Ser Gly His His Gln Pro Pro Gly
162                260                265                270
163 Gly Leu Glu Ser Pro Leu Leu Leu Asp Ser Pro Thr Ser Arg Thr Pro
164                275                280                285
165 Pro Pro Pro Ser Cys Ser Ser Ala Ser Ser Cys Ser Ser Ser Ala Ser
166 290                295                300
167 Ser Cys Ser Ser Ala Ser Ala Ala Ser Thr Pro Ser Gly Thr Pro Thr
168 305                310                315                320
169 Cys Cys Ala Ser Ala Ala Ala Ala Leu Arg Leu Leu Tyr Gly Thr Gly
170                325                330                335
171 Gly Ala Glu Asp Leu Leu Ala Pro Gly Ala Pro Cys Ala Ala Cys Ser
172                340                345                350
173 Ser Ala Ser Cys Ala Asn Asn Ala Phe Ala Phe Gly Pro Glu Leu Ser
174 355                360                365
175 Ser Leu Ile Thr Pro Leu Ala Ile Gln Thr His Asn Phe Ala Ala Val
176 370                375                380
177 Ala Ala Ala Ala Tyr Tyr Arg Ser Gln Gln Gln Gln Gln Gln Gly
178 385                390                395                400
179 Leu Ala Pro Pro Ala Gln Pro Pro Ala Pro Pro Ser Ala Thr Leu Pro
180                405                410                415
181 Ala Gly Ala Ala Ala Pro Pro Ser Pro Pro Phe Ser Phe Gln Leu Pro
182                420                425                430
183 Arg Arg Leu Ser Asp Ser Pro Val Phe Asp Ala Pro Pro Ser Pro Pro
184 435                440                445
185 Asp Ser Leu Ser Asp Arg Asp Ser Tyr Leu Ser Gly Ser Leu Ser Ser
186 450                455                460
187 Gly Ser Leu Ser Gly Ser Glu Ser Pro Ser Leu Asp Pro Gly Arg Arg
188 465                470                475                480
189 Leu Pro Ile Phe Ser Arg Leu Ser Ile Ser Asp Asp
190                485                490
192 <210> SEQ ID NO: 4
193 <211> LENGTH: 276
194 <212> TYPE: PRT
195 <213> ORGANISM: Xenopus laevis
197 <400> SEQUENCE: 4
198 Met Glu Ile Ser Asn Asp Ser Leu Asp Leu Phe Ser Ser Phe Phe Pro
199 1                5                10                15
200 Gln Leu Ser Pro Pro Ala Asp Pro Glu Thr Pro Leu Leu Pro Ser Phe
201                20                25                30
202 Ser Ala Pro Pro Lys His Leu Ser Leu Ser Ser Leu Arg Tyr Lys Thr
203 35                40                45
204 Glu Leu Cys Ser Arg Tyr Ala Glu Ser Gly Phe Cys Ala Tyr Arg Asn
205 50                55                60
206 Arg Cys Gln Phe Ala His Gly Leu Ser Glu Leu Arg Pro Pro Val Gln
207 65                70                75                80

```

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Input Set : A:\W127221.txt

Output Set: N:\CRF3\03012002\J049586.raw

```

208 His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Ser Phe His Val Leu Gly
209      85      90      95
210 Thr Cys Asn Tyr Gly Leu Arg Cys Leu Phe Ile His Ser Pro Gln Glu
211      100      105      110
212 Arg Arg Glu Pro Pro Val Leu Pro Asp Asn Leu Ser Leu Pro Pro Arg
213      115      120      125
214 Arg Tyr Gly Gly Pro Tyr Arg Glu Arg Cys Arg Leu Trp Ser Ala Pro
215      130      135      140
216 Gly Gly Cys Pro Tyr Gly Ala Arg Cys His Phe Gln His Pro Lys Ser
217 145      150      155      160
218 Ala Arg Glu Thr Cys Arg His Phe Ala Ala Leu Gly Asp Cys Pro Tyr
219      165      170      175
220 Gly Ala Cys Cys His Phe Ser His Ser Pro Pro Leu Asp Arg Trp Gly
221      180      185      190
222 Ser Gly Thr Lys Asn Ser Ser Gly Ser Leu Ser Pro Ser Asp Pro Asp
223      195      200      205
224 Ser Asp Pro Asp Thr Pro Val Leu Ser Glu Ser Pro Ala Asn Asn Ala
225      210      215      220
226 Phe Ser Phe Ser Ser Leu Leu Pro Leu Ala Leu Arg Leu Gln Ile
227 225      230      235      240
228 Leu Gly Asp Asp Asp Leu Pro Thr Ala Ser Asp Pro Leu Pro Gly Asp
229      245      250      255
230 Asp Thr Asp Leu Leu Pro Gly Asp Glu Glu Ile Ala Gln Gly Leu Leu
231      260      265      270
232 Ser Val Leu Gly
233      275
235 <210> SEQ ID NO: 5
236 <211> LENGTH: 327
237 <212> TYPE: PRT
238 <213> ORGANISM: Cyprinas carpio
240 <400> SEQUENCE: 5
241 Met Phe Glu Thr Ser Thr Asp Asn Leu Phe Leu Phe Pro Thr Glu Gly
242 1      5      10      15
243 Leu Asn Glu Ala Phe Phe Pro Glu Glu Gly Leu Ala Ser Gly Ser Leu
244      20      25      30
245 Ser Leu Ala Lys Ala Leu Leu Pro Leu Val Glu Ser Pro Ser Pro Pro
246      35      40      45
247 Met Thr Pro Trp Leu Cys Ser Thr Arg Tyr Lys Thr Glu Leu Cys Ser
248      50      55      60
249 Arg Tyr Ala Glu Thr Gly Thr Cys Lys Tyr Ala Glu Arg Cys Gln Phe
250 65      70      75      80
251 Ala His Gly Leu His Asp Leu His Val Pro Ser Arg His Pro Lys Tyr
252      85      90      95
253 Lys Thr Glu Leu Cys Arg Thr Tyr His Thr Ala Gly Tyr Cys Val Tyr
254      100      105      110
255 Gly Thr Arg Cys Leu Phe Val His Asn Leu Lys Glu Gln Arg Pro Val
256      115      120      125
257 Arg Gln Arg Cys Arg Asn Val Pro Cys Arg Thr Phe Arg Ala Phe Gly
258      130      135      140

```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/049,586

DATE: 03/01/2002

TIME: 14:44:20

Input Set : A:\W127221.txt

Output Set: N:\CRF3\03012002\J049586.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No  
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27